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COUNTY
COWETA

PROJECT NUMBER
CSBRG-0006-00(957)

SHEET NO.
80

TOTAL SHEETS
97

REVISED AUGUST 26,2008

ESPCP GENERAL NOTES:

The escape of sediment from the site shall be prevented by the installation of erosion and sediment control measures and practices prior to, or concurrent with, land disturbing activities.

Erosion control measures will be maintained at all times. If full implementation of the approved plan does not provide for effective erosion control, additional erosion and sediment control measures shall be implemented to control or treat the sediment source.

PLAN ALTERATIONS

The Erosion Sedimentation and Pollution Control Plan (ESPCP) is provided by the Department. It addresses the staged construction of the project based on common construction methods and techniques. If the Contractor elects to alter the stage construction from that shown in the plans or utilize construction techniques that render this plan ineffective, the Contractor shall revise the plans in accordance to Special Provision 161 of the contract.

The Contractor, the Certified Design Professional and the WECS shall carefully evaluate this plan prior to commencing land disturbing activities. A major modification or deletion of structural BMP's with a hydraulic component requires a formal revision of the ESPCP and the signature of a GSWCC level-II-certified design professional. Additional BMP's may be added per Special Provision 161 - Control of Soil Erosion and Sedimentation.

TEMPORARY MULCHING

EPD General Permit GAR 100002 states that "Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding." - However, the Department typically requires disturbed areas to be stabilized every 7 days. The construction documents, special provisions, or Specification may require mulching more often than 7 days.

VEGETATION AND PLANTING SCHEDULE

All temporary and permanent vegetative practices including plant species, planting dates, seeding fertilizer, lime and mulching rates for this project can be found in section 700 of the current edition of the Department's specifications and other applicable contract documents, special provisions, or landscaping plans.

SEQUENCE OF MAJOR ACTIVITIES

The Contractor is responsible for developing the construction schedule for the project. The construction schedule for this project shall be submitted with the NOI. A copy of the construction schedule shall be maintained at the project site.

The following Erosion Control measures shall as a minimum be implemented during each phase of construction:

Clearing Phase

Perform clearing and grubbing operations. Install construction exits, silt fences at perimeter of disturbed areas, fabric and rip rap check dams. Mulch or temporary grassing shall be applied to all exposed areas within 7 days of land disturbance.

Grading Phase

Perform mass grading operations. Install silt fence at toe of all fill slopes. Install fabric and rip rap check dams in areas of concentrated flow. Install silt filter bags and temporary pipe slope drains as shown on plans. Mulch or temporary grassing shall be applied to all exposed areas within 7 days of land disturbance. Maintain construction exits and silt fences at perimeter of disturbed areas.

Final Phase

Install permanent erosion control measures as soon as final grade is achieved. Remove temporary slope drains. Install erosion control mats on all slopes steeper than 2.5:1. Install Bituminous Treated Roving, rip rap channel lining, and riprap at ditch outfalls.

PETROLEUM STORAGE, SPILLS AND LEAKS

The plans provided herein do not anticipate the storage of petroleum products onsite. The Contractor shall at a minimum provide an action plan and keep the necessary materials on site for the capture and disposal of any petroleum product leaks or spills associated with the servicing, refueling or operation of any equipment utilized in the work. A copy of the action plan shall be submitted to the Project Engineer and maintained on the project site. All personnel operating or servicing equipment shall be familiar with this plan. The Contractor shall not park, refuel, or maintain equipment within stream buffers.

If the Contractor elects to store petroleum products on site, the Contractor shall prepare an ESPCP addendum that addresses the additional BMPs needed for onsite storage and spill prevention for petroleum products. This plan shall be prepared by a Certified Design Professional as required by GARI00002 for inclusion with these plans. The Contractor's attention is specifically directed to Standard Specification 107-Legal Regulations and Responsibility to the public for additional requirements.

SOIL SERIES INFORMATION

The following is a summary of the soils that are expected to be found on the project site:

AmB Appling sandy loam, 2 to 6 percent slopes, (50% of the total project area) is expected to be found throughout the project. These soils are rated "moderate" in terms of erosion hazard; therefore erosion will occur, requiring maintenance and erosion control measures. Silt fence, fabric check dams, rip rap check dams, slope erosion control mats, rip rap, mulch, temporary and permanent grassing and construction exits were included for this project.

MdC, Madison gravelly sandy loam 6 to 10 percent slopes, (35% of the total project area) is expected to be found throughout the project. These soils are rated "moderate" in terms of erosion hazard; therefore most likely erosion will occur, requiring maintenance and erosion control measures. Silt fence, fabric check dams, rip rap check dams, slope erosion control mats, rip rap, mulch, temporary and permanent grassing and construction exits were included for this project.

RK, Riverview-Chewacla association, (15% of the total project area) is expected to be found throughout the project. These soils are rated "slight" in terms of erosion hazard; therefore erosion will likely occur, requiring maintenance and erosion control measures. Silt fence, fabric check dams, rip rap check dams, silt filter bags, slope erosion control mats, rip rap, mulch, temporary and permanent grassing and construction exits were included for this project.

Due to the size and scope of this project and the nature of soil series maps, it is not reasonably possible to identify the precise locations of the above reference soils on the plans. The NRCS soil survey and soil series maps for the project area are also available online at <http://websoilsurvey.nrcs.usda.gov>

POST-CONSTRUCTION BMP'S

All permanent, post-construction BMP's are shown in the construction plans and in the ESPCP plan. The post-construction BMP's for this project may consist of vegetation, rip-rap at pipe outlets for velocity dissipation and outlet stabilization, vegetated swales/ditches where practical, channel/ditch stabilization with Turf Reinforcing Mats, rip-rap and concrete ditch lining where necessary. The post-construction BMP's will provide permanent stabilization of the site and prevent accelerated transportation of sediment and pollutants into receiving waters.

SILT FENCE INSTALLATIONS WITH J-HOOKS AND SPURS

Silt fence should never be run continuously. The silt fence should turn back into the fill or slope to create small pockets that trap silt and force stormwater to flow through the silt fence. This technique, or configuration, is commonly referred to as J-Hooks or spurs. The J-Hooks shall be utilized on all silt fences that are located around the perimeter of the project and along the toe of embankments or slopes. The J-Hooks shall be spaced in accordance with Typical Location Details for silt fences/baled straw. Spacing for J-Hooks shall not be less than 50 feet except as noted. Silt fences that are near the outlet of culverts, cross drains, and storm drains shall have a minimum of three (3) J-Hooks on both sides of the structure at spacing not to exceed 30 feet. J-Hooks shall be paid for as silt fence items per foot. All costs and other incidental items are included in cost of installing and maintaining the silt fence.

MAINTENANCE AND STABILIZATION MEASURES

See Special Provision 161 and 700 and other contract documents for maintenance and stabilization measures.

WASTE DISPOSAL

Where attainable, locate waste collection areas, dumpsters, trash cans and portable toilets at least 50 feet away from streets, gutters, watercourses and storm drains. Secondary containment shall be provided around liquid waste collection areas to minimize the likelihood of contaminated discharges. The Contractor shall comply with applicable state and local waste storage and disposal regulations and obtain all necessary permits. Solid materials, including building materials, shall not be discharged to Waters of the State, unless authorized by a Section 404 Permit.

INSPECTIONS

All inspections shall be documented on the appropriate Department Inspection forms. See Special Provision 167 and other contract documents for inspection requirements. These inspections shall continue until the Notice of Termination (NOT) is submitted.

Failure to perform inspections as required by the contract documents and the NPDES permit shall result in the cessation of all construction activities with the exception of Traffic Control and Erosion Control. Continued failure to perform inspections shall result in non-refundable deductions as specified in the contract documents.

By agreement with Georgia EPD, the Department's Construction Project Engineers will be responsible for the seven day inspections required for new BMP installations.

NON-STORM WATER DISCHARGES

Non-storm water discharges defined in Part III.A.2 of the NPDES Permit will be identified after construction has commenced. These discharges shall be subject to the same requirements as storm water discharges required by the Georgia Erosion and Sedimentation Control Act, the NPDES Permit, the Clean Water Act, The Manual for Erosion and Sediment Control in Georgia, Department Standards, and contract documents.

DE-WATERING ACTIVITIES AND USE OF PUMPS

Any pumped discharge from an excavation or disturbed area shall be routed through an appropriately sized sediment basin, silt filter bag or shall be treated equivalently with suitable BMP's. The contractor shall ensure the post BMP treated discharge is sheet flowing. Failure to create sheet flow will obligate the contractor to perform water quality sampling of their pumped discharges. The contractor shall prepare sampling plans in accordance with the current GARI00002 NPDES permit utilizing by a Certified Design Professional. No separate payment will be made for water quality sampling of pump discharges.

OTHER CONTROLS

The contractor shall follow this ESPCP and ensure and demonstrate compliance with applicable State and/or local waste disposal, sanitary sewer or septic system regulations.

The Contractor shall control dust from the site in accordance with Section 161 of the current edition of the Department's Specifications.

SEDIMENT STORAGE

The following table summarizes the required and available sediment storage for every outfall on this project. The Contractor shall provide and maintain the storage volumes for the BMPs specified in this table.

Outfall ID	Total Drainage area (acres)	Disturbed area (acres)	Required Sediment Storage Volume (yd³)	Total Storage Volume Provided (yd³)	Sediment Basins		Fabric Check Dam		Rip Rap Check Dam			
					Pond #	Total Volume	# of Devices	Total Volume Per Check Dam (yd³)	Total Volume (yd³)	# of Devices	Total Volume Per Check Dam (yd³)	Total Volume (yd³)
STA. 15+42.00 LT	1.93	0.80	129.31	153.98			7.00	16.43	114.98	6.00	6.43	39
STA. 14+50.00 RT	0.77	0.73	51.59	120.08			6.00	16.51	99.08	4.00	5.14	21.00
STA. 18+67.00 RT	1.39	0.74	93.13	211.36			8.00	26.42	211.36			
STA. 20+00.00 LT	8.21	0.66	550.07	151.46			6.00	25.24	151.46			

The disturbing activities consist of mass grading confined to
1) replacement of existing deficient bridge, 2) roadway profile adjustment for new bridge,
3) full depth reconstruction, 4) installation of ditches to maintain positive drainage.

Due to the scope of work, sediment basins are not appropriate for this project. For outfalls not satisfying the required sediment storage, in proportion to the disturbed areas, the disturbance associated with the installation of sediment basins will not be the most efficient method in containing the sediment within this project. Silt fences, fabric and riprap check dams, temporary slope drains, silt gates, and riprap at pipe and ditch outlets will be adequate to prevent the transport of sediment into receiving waters.

In order to prevent runoff from bypassing inlet sediment traps, a temporary berm shall be installed on the downstream side of all inlet sediment traps that are not located in a low point or an excavated sump. Temporary berms, when necessary, shall be a minimum of 18" high and constructed in a manner that ensures stormwater does not bypass the inlet. The Contractor may submit alternate temporary containment berm designs to the Project Engineer for approval.

STREAM BUFFER ENCROACHMENT

Stream Buffers are not impacted by this project.

* Warm water streams have a 25-foot minimum buffer as measured from the wrested vegetation. Cold Water streams have a 50-foot buffer as measured from the wrested vegetation.
** Locations are approximate, a detailed location of stream buffers and authorized work areas are shown on the Individual BMP sheets.


DISCHARGES INTO, OR WITHIN ONE LINEAR MILE UPSTREAM OF AND WITHIN THE SAME WATERSHED AS, ANY PORTION OF A BIOTA IMPAIRED STREAM SEGMENT.

All outfalls are either located further than 1 linear mile upstream or outside of the watershed of an Impaired Stream Segment that has been listed for criteria violated, "Bio F" (Impaired Fish Community) and/or "Bio M" (Impaired Macro Invertebrate Community), within Category 4a, 4b or 5, and the potential cause is either "NP" (nonpoint source) or "UR" (urban runoff).

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270 Peachtree St. NW, Suite 1500 • Atlanta, GA 30303-1283
Main: (678) 954-5000 • www.chacompanies.com

REVISION DATES

GEORGIA
DEPARTMENT OF TRANSPORTATION

ESPC GENERAL NOTES

CANNON ROAD OVER
WHITE OAK CREEK

DRAWING No.
51-01